

Amendment and Response to Office Action
Mailed February 17, 2005
For Serial No. 10/037,502

REMARKS

In the Office Action, the Examiner rejected claims 1-20. By this paper, the Applicant has amended claim 17 and added claims 21-24. No new matter has been added. Accordingly, claims 1-24 are now pending in the application. The Applicant respectfully requests reconsideration of the above-identified application in view of the remarks set forth below.

Rejections Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-2, 6-10, 14-18, and 20 under 35 U.S.C. § 102(e) as being anticipated by Clark et al. (U.S. Patent No. 6,233,634 B1, hereafter "the Clark reference"). Specifically, the Examiner stated:

As to claim 9, Clark teaches a managed server (fig. 1 server 10), comprising:
a video controller (video controller 20) that is operatively connected to a communication bus (expansion bus); and
a remote server management controller (server controller 26) that is connected to the communication bus and adapted to snoop data that is intended for the video controller from the communication bus (col. 8 lines 36-55), the remote server management controller comprising:
a FIFO (fig. 5 local frame buffer 48) that is adapted to store data snooped from the communication bus (col. 9 lines 46-50); and
an embedded bus master (detection logic 30) that is operatively connected to the communication bus, the embedded bus master being adapted to take control of the communication bus responsive to a signal that the FIFO has become filled to a predetermined level to prevent the FIFO from being overflowed with snooped data while snooped data stored in the FIFO continues to be processed (col. 9 line 44 to col. 11 line 18).

As to claims 10 and 2, Clark teaches a passive throttling register that stores a value (col. 7 lines 37-48); and wherein the

Amendment and Response to Office Action
Mailed February 17, 2005
For Serial No. 10/037,502

embedded bus master takes control of the communication bus by reading the value and preventing communication on the communication bus for a time period that corresponds to the value (col. 9 line 44 to col. 11 line 18).

As to claims 14 and 6, Clark teaches the value is stored in the passive throttling register when the remote server management controller is initialized (col. 10 lines 27-43).

As to claims 15 and 7, Clark teaches the value is updated periodically (col. 22 line 46 to col. 23 line 14).

As to claims 16 and 8, Clark teaches the value is proportional to a volume of traffic on the communication bus (col. 22 line 63 to col. 23 line 14).

As to claim 1, Clark teaches a remote management controller (fig. 1 server controller 26) that snoops data from a communication bus (expansion bus col. 8 lines 36-55) comprising:
a FIFO (fig. Local frame buffer 48) that is adapted to store data snooped from the communication bus (col. 9 lines 46-50); and
an embedded bus master (detection logic 30) that is operatively connected to the communication bus, the embedded bus master being adapted to take control of the communication bus, the embedded bus master being adapted to take control of the communication bus responsive to a signal that the FIFO has become filled to a predetermined level to prevent the FIFO from being overflowed with snooped data while snooped data stored in the FIFO continues to be processed (col. 9 line 44 to col. 11 line 18).

As to claim 17, Clark teaches a method of passively throttling a communication bus (fig. 4 EISA bus), comprising the acts of:

snoop a communication bus (col. 8 lines 36-55);
storing data snooped from the communication bus in a storage device (col. 9 lines 46-50); determining if the storage device is filled to a predetermine level (col. 9 line 44 to col. 11 line 18);

preventing further transfers of data on the communication bus responsive to the act of determining of the storage device is filled to a predetermined level (col. 9 line 44 to col. 11 line 18).

Amendment and Response to Office Action
Mailed February 17, 2005
For Serial No. 10/037,502

As to claim 18, Clark teaches the method of claim 17, further comprising the acts of:
storing a value in a register (col. 7 lines 37-48);
reading the value (col. 9 line 27-43); and
wherein the act of preventing further transfers of the specific type of data is performed for a time period that corresponds to the value (col. 9 line 44 to col. 11 line 18).

As to claim 20, Clark teaches the method of claim 17, wherein the recited acts are performed in the recited order (col. 8 line 1-26).
Office Action, pages 2-5.

Legal Precedent

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under section 102, a single reference must teach each and every limitation of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Accordingly, Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. The prior art reference also must show the *identical* invention "*in as complete detail as contained in the ... claim*" to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

Amendment and Response to Office Action
Mailed February 17, 2005
For Serial No. 10/037,502

Deficiencies of the Rejection

As stated above, the Examiner rejected claims 1-2, 6-10, 14-18, and 20 under 35 U.S.C. § 102(e) as being anticipated by the Clark reference. The Applicant respectfully traverses these rejections. In particular, the Applicant asserts that the Clark reference does not anticipate independent claims 1, 9, and 17, or the claims that depend therefrom. For example, independent claims 1 and 9 recite "an embedded bus master that is ... [adapted to] *prevent the FIFO from being overflowed* with snooped data while snooped data stored in the FIFO *continues to be processed*." (Emphasis added). Independent claim 17 recites a method comprising "*preventing further transfers* of data on the communication bus responsive to the act of determining if the storage device is filled to a predetermined level." (Emphasis added).

In sharp contrast, the Clark reference is directed towards a "server controller [that] snoops display data written from the host CPU to the video controller and mirrors the display data on buffers within the server controller." Clark, Abstract, lines 20-24. This server controller includes buffers 54 and 56, which contain screen changes snooped from the host CPU. See Clark, col. 9, lines 59-67. The server controller disclosed in the Clark reference also includes detection logic that is configured to detect when the buffers 54 and 56 become full. See *id*. The detection logic disclosed in the Clark reference, however, is clearly not configured to take control or ownership over a bus. See *id*; see also Clark, col. 10, lines 1-14. As such, because the Clark reference does not disclose logic that is configured to take control or ownership over a bus, the Applicant respectfully asserts that the Clark reference cannot disclose the above recited claim

Amendment and Response to Office Action
Mailed February 17, 2005
For Serial No. 10/037,502

features. For this reason alone, the Applicant respectfully requests withdrawal of the rejections against independent claims 1, 9, and 17.

Moreover, because the logic disclosed in the Clark reference does not take control or ownership of a bus, the Clark reference cannot disclose an embedded bus master adapted to "prevent the FIFO from being overflowed," as recited in claim 1 and 9 or "preventing further transfers of data on the communication bus," as recited in claim 16. As described above, the detection logic disclosed in the Clark reference is configured to merely identify that a buffer overflow has occurred – not to prevent the overflow from happening. *See Clark*, col. 9, line 44 – col. 10, line 5. In fact, rather than prevent overflows from happening, the system disclosed in the Clark reference is clearly designed to *ignore* changes that occur after the buffers are full. *See id.* For this additional reason, the Applicant respectfully asserts that the Clark reference does not anticipate independent claims 1, 9, and 17. Accordingly, the Applicant respectfully requests that the Examiner withdraw the Section 102 rejections against claims 1-20.

Rejections Under 35 U.S.C. § 103

The Examiner also rejected claims 3-5 and 11-13, and 19 under 35 U.S.C. § 103(a) as being unpatentable by the Clark reference in view of Brown (U.S. Patent No. 6,728,808 B1, hereafter "the Brown reference"). Specifically, the Examiner stated:

As to claims 11-12 and 3-4, Clark fails to explicitly teach a PCI bus and a number of PCI clock cycles (col. 7 lines 24-34). It would have been obvious to a person of ordinary skill in the art to have the PCI bus in order to provide a high speed and low latency bus architecture (col. 1 lines 57-59).

Amendment and Response to Office Action
Mailed February 17, 2005
For Serial No. 10/037,502

As to claims 13, 5 and 19, Clark teaches that the embedded bus master is adapted to take control of the communication bus by initiating an EISA read transaction on the passive throttling register (col. 9 line 44 to col. 11 line 18). Clark fails to explicitly teach a PCI bus. Brown; however, teaches the PCI bus (col. 7 lines 24-34). It would have been obvious to a person of ordinary skill in the art to have the PCI bus in order to provide a high speed and low latency bus architecture (col. 1 lines 57-59).

Office Action, page 5.

Legal Precedent

The Applicant respectfully traverses these rejections. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

Amendment and Response to Office Action
Mailed February 17, 2005
For Serial No. 10/037,502

Deficiencies of the Rejection

As stated above, the Examiner rejected claims 3-5, 11-13, and 19 under 35 U.S.C. § 103(a) as being unpatentable over the Clark reference in view of the Brown reference. The Applicant respectfully traverses these rejections. Specifically, the Applicant asserts that claims 3-5, 11-13, and 19 are allowable based on their dependencies on independent claims 1, 9, and 17, because the Brown reference does not cure the deficiencies described above in regard to the Clark reference. For these reasons, claims 3-5, 11-13, and 19 are believed to be allowable over the cited references taken alone or in combination with each other. Thus, the Applicant respectfully requests that the Examiner withdraw the Section 103 rejections against claims 3-5, 11-13, and 19.

New Claims

The Applicant respectfully requests that new claims 21-24 be considered. The new claims are fully supported by the specification and the Applicant respectfully submits that the prior art of record does not disclose or suggest the recited subject matter of new claims 21-24. For example, the Applicant asserts that neither of the cited references discloses "a bus master communicatively coupled to the bus, the bus master configured to throttle a flow of snooped data from the bus to the queue if a predetermined amount of data is stored in the queue," as recited in claim 21. For at least this reason, the Applicant respectfully submits that new claims 21-24 are allowable over the cited references taken alone or in combination with each other.

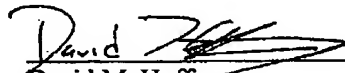
Amendment and Response to Office Action
Mailed February 17, 2005
For Serial No. 10/037,502

Conclusion

The Applicant respectfully submits that all pending claims should be in condition for allowance. However, if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned Attorney at the telephone number indicated below.

Respectfully submitted,

Date: May 16, 2005


David M. Hoffman
Reg. No. 54,174
(281) 970-4545

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 80527-2400